International Business Management 2016 vol.10 N23, pages 5629-5632

Network modelling of biological wastewater treatment system of paint manufacture

Savdur S., Kadochnikova E.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© Medwell Journals, 2016.The study discusses the technological complex of Biological wastewater Treatment (BOT) of paint manufacture. Based on the review of the main modeling methods of discrete-continuous chemical processes, it substantiates expediency of using the theory of Petri Nets (PN) for modeling the process of wastewater treatment in paint manufacture. It is proposed to use a modification of Petri nets which is focused on modeling and analysis of discrete-continuous chemical processes by prioritizing transitions, timing marks in positions and transitions. A model in the form of Modified Petri Nets (MPN) is designed. A software package to control the process for wastewater treatment is designed by means of SCADA TRACE MODE.

http://dx.doi.org/10.3923/ibm.2016.5629.5632

Keywords

Chemical-engineering system, Computer modellng, Modeled systems, Modified Petri nets, Wastewater treatment of paint manufacture